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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/039,299	01/02/2002	Steven J. Harrington	D/A1096 XER 2 0436	2159

7590 09/13/2004

Joseph D. Dreher  
Fay, Sharpe, Fagan,  
Minnich & McKee, LLP  
1100 Superior Avenue, 7th Floor  
Cleveland, OH 44114-2518

EXAMINER
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RAHMJOO, MANUCHER

ART UNIT	PAPER NUMBER
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2676

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DATE MAILED: 09/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/039,299

Applicant(s)

HARRINGTON, STEVEN J.

Examiner

Mike Rahmjoo

Art Unit

2676

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 July 2004.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-21 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-21 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1- 6, 9- 14, and 17- 21 are rejected under 35 U.S.C. 102(e) as being anticipated by Naegle et al(US Pub 2001/0033287), hereinafter, Naegle.

As per claims 1, 9 and 18 Naegle teaches scanning the array to determine the pixel values see for example figures 4- 5 and 8- 10 and page17 paragraph [0191]; segmenting the array into blocks of the pixel values see for example figures 4- 5, 8- 10, and 12 and paragraphs[0160] and [0194]; performing an associative operation on the pixel values of each block to determine properties of the each block see for example paragraphs [0076] and [0162]; storing the properties of the each block in a table see for example figures 3 and 12 and paragraph [0162] and [0224]; providing a window defining a fixed size region of the image, the window having vertices and being configured such that a single vertex at most will be encompassed by any given block having portions within the fixed size region see for example paragraphs [0233] and [0235](graphics data

comprising polygon information i.e., vertex data which is designed to use default sample mode as well as alternative sample mode such as one sample per pixel); determining which portions of which blocks are within the fixed size region see for example paragraph [0140] (bin position corresponding to particular positions on the display and to the pixel centers) and figures 15- 17; selecting a property for each portion of each block within the fixed size region from the table based on the determining of which portions of which blocks are within the fixed size region and locations of the vertices of the window see for example paragraph [0221] (window ID of each window attached to each sample or bin with color attributes); and performing the associative operation on the selected properties to determine an overall property for the fixed size region see for example paragraphs [0162] and [0224] (interpolation based upon the color and texture map information associated with the vertices of the triangle and then storing the sample in sample buffer).

As per claims 2- 3, and 10- 11 Naegle teaches performing the associative operation on the pixel values comprises determining maximums and minimums of the pixel values see for example paragraph [0185] (filtering which ensures that the samples located the closest to the pixel center will contribute the most (maximum), while pixels located the far from the pixel center will contribute less (minimum) to the final output pixel values which automatically performs anti-aliasing by smoothing any abrupt changes in the image (e.g., from a dark line to a light background)).

As per claims 4- 5, 12- 13 and 19- 20 Naegle teaches performing the associative operation on the selected properties comprises performing an operation to determine

a maximum and a minimum value for the fixed size region see for example paragraph [0184] (the weighted samples in different bins (fixed size region) may then be summed with a running total to determine the final output pixel's un-normalized (and pre-gamma correction) color value which may be appearing too bright (minimum value of a selected property) or too dark (maximum value of a selected property) by compensating for gain introduced by the convolution process); and properties of the block comprise minimums and maximums of the pixel values see for example figure 14 with each sample corresponding to a block with minimum and maximum values.

As per claims 6, and 14 Naegle teaches providing a window defining a fixed size region of the image comprises providing a window having a rectangular shape see for example page 17, paragraph [0191].

As per claim 21 Naegle teaches the complex window is an annulus see for example figures 14 and 17.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 7, 8, 15, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Naegle et al(US Pub 2001/0033287), hereinafter, Naegle.

As per claims 7, 8, 15, and 16 Naegle teaches providing a window defining a fixed size region of the image comprises providing a window of rectangular shape.

However, Naegle does not teach an octagonal or hexagonal shape.

It would have been made obvious to one of ordinary skilled in the art at the time the invention was made to incorporate octagonal or hexagonal shape window based on design choice and the characteristics required by the user to do the specific tasks assigned by the user and therefore make it a versatile device.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

### ***Response to Arguments***

Applicant's arguments filed 07/15/2004 have been fully considered but they are not persuasive.

As per applicant's remark filed 07/15/2004, applicant argues that the primary art made of the reference does not teach applicant's claimed invention wherein applicant recites "an associative operation be performed on an array of pixel values in a fixed region of a digital image". Examiner respectfully disagrees.

Paragraph [0156] of Naegle recites "the samples are grouped into bins". The grouping which is performed clearly reads on applicant's "associative operation" with bins corresponding to "a fixed region" as claimed. Examiner would suggest amending "associative operation" to further distinguish applicant's invention from the applied prior art. Paragraph [0250] of Naegle teaches "each **sample** may be associated with a window ID that further associates each sample, through a look-up table, with **certain window attributes**, such as color attribute, source attribute, sample mode, and filter type."

Thus, Naegle also teaches determining properties of regions of images.

### **Inquiry**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mike Rahmjoo whose telephone number is (703) 305-5658. The examiner can normally be reached on 6:30- 3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Bella can be reached on (703) 308- 6829. The fax phone numbers

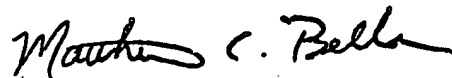
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for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872- 9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4750.

Mike Rahmjoo

September 9, 2004

A handwritten signature in black ink, reading "Matthew C. Bella". The signature is fluid and cursive, with the first name "Matthew" being more prominent and the last name "Bella" following in a similar style.

MATTHEW C. BELLA  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600